

REMARKS

Applicants respectfully request reconsideration of the present application in view of the reasons that follow. Claims 1, 15, and 29 have been amended. Claims 33-38 were previously canceled. Claims 1-32 are now pending in this application.

I. Allowance of Claims

Applicants thank the Examiner for acknowledging that Claims 5, 10, 19, and 24 would be allowable if rewritten in independent form. Applicants note that Claim 6 depends from Claim 5 and that Claims 20 and 21 depend from Claim 19. Thus, Applicants respectfully submit that Claims 6, 20, and 21 also should be found allowable for at least this reason.

II. Rejection of Claim 15 under 35 U.S.C. § 112

On page 2 of the Office Action, the Examiner rejected Claim 15 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner stated that “[t]he phrase ‘the temporary’ render[s] Claim 15 indefinite.” Applicants thank the Examiner for noting this clerical error. Applicants have amended Claim 15 to correct the clerical error “the temporary” to state “the temporary address.” As a result, Applicants respectfully request withdrawal of the rejection.

III. Rejection of Claims 1-3, 6-9, 11-13, 29, 30 and 31 under 35 U.S.C. § 102(e)

On page 3 of the Office Action, Claims 1-3, 6-9, 11-13, 29, 30 and 31 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. 2004/0042446 to Koch *et al.* (hereafter “Koch”). Applicants note that Claim 6 depends from Claim 5 which the Examiner indicated would be allowable if rewritten in independent form. Thus, Applicants respectfully submit that Claim 6 also should be found allowable for at least this reason.

Although Applicants respectfully disagree with the Examiner’s characterization of Koch, Applicants have amended independent Claims 1, 15, and 29 in order to further

prosecution. Support for the amendments to Claims 1, 15, and 29 can be found at least in paragraph [0048] of the specification. Applicants respectfully submit that Koch fails to teach, suggest, or describe all of the features recited in at least amended independent Claims 1, 15, and 29.

Independent Claim 1 recites:

configuring a temporary address for an interface of a sub-element of a network element, the network element comprising a control module and the sub-element, wherein the temporary address is valid in an internal network associated with the network element;

retrieving an identifier of the network element from the control module; and

defining a second address for the interface of the sub-element based on the retrieved identifier of the network element and the temporary address, wherein the second address is valid in an external network with which the network element communicates.

(Underlining added.) Though independent Claims 15 and 29 have a different scope, Claims 15 and 29 include similar features.

Applicants respectfully submit that Koch fails to teach or suggest “configuring a temporary address ..., wherein the temporary address is valid in an internal network associated with the network element” and “defining a second address for the interface of the sub-element ..., wherein the second address is valid in an external network with which the network element communicates” as recited in amended independent Claims 1, 15, and 29.

A. configuring a temporary address ..., wherein the temporary address is valid in an internal network associated with the network element

The Examiner states:

As for claim 1, [Koch] discloses a method for configuring addresses in a packet switched data communication system (Abstract and Fig. 2), the method comprising: configuring a temporary address for an interface of a sub-element of a

network element ([0031]: PON interface 12 associates a DHCP obtained IP address for a client: [0032]: DHCP defines temporary address [0034]: PON interface 12 forwards the DHCP request forwards the DHCP request to the provisioned DHCP server 36 via the respective DHCP relay agent 36 of PON interface module 34), the network element comprising a control module (Fig. 2: DHCP RELAY AGENT 38A)...

(Office Action at pg. 3; underlining added). Thus, the Examiner characterizes the DHCP RELAY AGENT 38A as a control module, and a DHCP obtained IP address as a temporary address.

Koch teaches a passive optical network (PON). (See para. [0016]; underlining added). FIGS. 2 and 3 of Koch show a DHCP server 36 that is part of an Internet service provider (ISP) 18. The ISPs 18 are coupled to the PON 10 (PON interface 12) via a router 20. (See para. [0016]). Hence the ISPs 18 are external to the PON 10. FIGS. 2 and 3 of Koch show that the DHCP RELAY AGENT 38A is part of the PON interface 12. Consequently, using the Examiner's construction, since the DHCP RELAY AGENT 38A is characterized as a control module, the PON may correspond to an internal network.

Koch teaches that "PON 10 ... may use DHCP relay techniques to provide IP addresses to clients represented on network nodes 28." (Para. [0031]). Further, Koch states that "when a DHCP client wants to obtain an IP address, it broadcasts a DHCP request on a corresponding LAN segment that is attached to the Ethernet device of the respective network node 28." (Para. [0033]). Notably, Koch also states that the "PON interface 12 forwards the DHCP request to the provisioned DHCP server 36 via the respective DHCP relay agent 36 of PON interface module 34." (Para. [0034]).

Therefore, the DHCP server 36 of Koch is not part of the PON. The DHCP obtained IP address (temporary address) must be mapped "with a respective PON interface module 34." (Para. [0031]). As a result, the DHCP obtained IP address is not "valid" on the PON (the internal network). Therefore, Koch fails to teach "configuring a temporary address for an interface of a sub-element of a network element, ..., wherein the temporary address is valid in an internal network associated with the network element" (underlining added) as recited in Claims 1, 15, and 29.

B. defining a second address for the interface of the sub-element

The Examiner states:

As for claim 1, [Koch] discloses a method for configuring addresses in a packet switched data communication system (Abstract and Fig. 2), the method comprising: ... the network element comprising a control module (Fig. 2: DHCP RELAY AGENT 38A) and the sub-element ([0033]: Fig. 2, client node 28A); retrieving an identifier of the network element from the control module ([0034]: PON interface 12 uses the information to create a mapping between the unique information from the DHCP request, e.g., the MAC address of the client device); and defining a second address for the interface of the sub-element based on the retrieved identifier of the network element and the temporary address ([0035]: PON 12 determines the appropriate PON interface module 34 for forwarding the packet using the mapping that associates the MAC address of the client device with a respective PON interface module 34) ...

(Office Action at pp. 3-4; underlining and bolding added). Paragraph [0031] of Koch states:

PON 10, illustrated in FIG. 2, may use DHCP relay techniques to provide IP addresses to clients represented on network nodes 28. In accordance with the invention, PON interface 12 associates a DHCP obtained IP address for a client with a respective PON interface module 34 on which the client resides and generates routing information to reflect the associations. For example, DHCP relay agent 38 monitors DHCP communications between DHCP servers 36 and the DHCP clients of network nodes 28 and updates the routing information that associates each PON interface module 34 with an associated set of IP addresses based on the monitored DHCP communications.

(Underlining and bolding added). Furthermore, paragraph [0034] of Koch states:

PON interface 12 uses the information to create a mapping between the unique information from the DHCP request, e.g., the MAC address of the client device, and PON interface module 34 on which the DHCP client resides. For example, if a client device that resides on node 28A of group 26A sends the DHCP request, PON interface 12 creates a mapping that associates the MAC address of the DHCP client device of node 28A with PON interface module 34A. PON interface 12

forwards the DHCP request to the provisioned DHCP server 36 via the respective DHCP relay agent 36 of PON interface module 34. The DHCP request may be provisioned with DHCP relay parameters such as a particular DHCP server 36 and a gateway address to which the DHCP request should be forwarded.

(Underlining and bolding added). Therefore, PON interface 12 merely maps and forwards DHCP traffic. Simply *mapping* a DHCP obtained IP address to an interface module is not “defining a second address for the interface of the sub-element” as recited in Claims 1, 15, and 29.

C. *defining a second address ..., wherein the second address is valid in an external network with which the network element communicates*

Even if the mapping of Koch could be considered analogous to a second address, which Applicants respectfully submit is not the case, the mapping is only useful within the PON. As the Examiner notes, “the mapping ... associates the MAC address of the client device with a respective PON interface module 34.” (Office Action at pg. 4). Here, the mapping by the PON cannot be used to address IP traffic within the ISPs 18 (here, an external network). Hence, Koch fails to teach, “defining a second address ..., wherein the second address is valid in an external network” (underlining added) as recited in Claims 1, 15, and 29.

Therefore, Koch fails to teach each and every element of at least independent Claims 1, 15, and 29. The remaining claims depend from one of Claims 1, 15, and 29. A rejection based on anticipation cannot be properly maintained where the reference used in the rejection does not disclose all of the recited claim elements. As a result, Applicants respectfully request withdrawal of the rejection of Claims 1-3, 6-9, 11-13, 29, 30 and 31 for at least this reason.

IV. Rejection of Claims 4, 14-18, 20-23, 25-28, and 32 under 35 U.S.C. § 103(a)

On page 7 of the Office Action, Claims 4, 14-18, 20-23, 25-28, and 32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Koch in view of U.S. Patent Publication No. 2003/0165230 to Reuss, (hereafter “Reuss”). Applicants note that Claims 20 and 21

depend from Claim 19 which the Examiner indicated would be allowable if rewritten in independent form. Thus, Applicants respectfully submit that Claims 20 and 21 also should be found allowable for at least this reason.

Claims 4 and 14 depend from Claim 1. Claims 16-18, 20-23, and 25-28 depend from Claim 15. Claim 32 depends from Claim 29. As discussed in Section III. above, Koch fails to teach at least “configuring a temporary address for an interface of a sub-element of a network element, ..., wherein the temporary address is valid in an internal network associated with the network element” and “defining a second address ..., wherein the second address is valid in an external network” as recited in amended independent Claims 1, 15, and 29.

Reuss teaches a system for managing call center and telephony assets. In particular, Reuss discloses: “[e]ach asset has associated therewith one or more network addresses, in some cases the network addresses [are] mapped from an electronic identifier stored within the particular asset or determined by a proxy.” (Abstract; underlining added). Specifically, Reuss teaches mapping serial numbers to IP addresses. (See paras. [0061], [0084]). However, Reuss fails to teach at least “configuring a temporary address for an interface of a sub-element of a network element, ..., wherein the temporary address is valid in an internal network associated with the network element” and “defining a second address ..., wherein the second address is valid in an external network” as recited in amended independent Claims 1, 15, and 29.

Therefore, Koch and Reuss, alone and in combination, fail to teach, suggest, or describe at least these features as recited in independent Claims 1, 15, and 29, as amended. An obviousness rejection cannot be properly maintained where the references used in the rejection do not disclose all of the recited claim elements. Therefore, Applicants respectfully request withdrawal of the rejection of Claims 4, 14-18, 20-23, 25-28, and 32 for at least this reason.

Applicants believe that the present application is in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date March 16, 2009

By



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